

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-15 (Cancelled)

16. (Currently Amended) A method for transmitting a digital data stream, in which method data clock information and data frame information are recovered from the digital data stream, the method comprising:

providing a digital data stream having successive data stream units,
each data stream unit including

a data frame,

a data block having data bits, and

a frame synchronization word having frame synchronization bits;
wherein a frame start of a data frame is defined when a plurality of dummy bits precedes a frame synchronization word, the plurality being at least one greater than the sum of the number of frame synchronization bits in the frame synchronization word and the number of data bits in the data block;

receiving the digital data stream;

detecting successive frame synchronization words of the successive data stream units;

determining the data clock information from a temporal spacing of the successive frame synchronization words; and

outputting the data clock information in a manner dependent on a temporal spacing of successive frame synchronization bits.

17. (Cancelled)

18. (Previously Presented) The method of claim 16, wherein providing a digital data stream comprises preceding the data bits of the data block by two frame synchronization bits.

19. (Previously Presented) The method of claim 16, wherein providing a digital data stream comprises encompassing useful data to be transmitted with the data bits of each data block.

20. (Previously Presented) The method of claim 16, wherein providing a digital data stream comprises providing a 32-bit data block.

21. (Currently Amended) The method of claim ~~[[17]]~~ 16, further comprising selecting the dummy bits to be logic ones.

22. (Previously Presented) The method of claim 16, wherein providing a digital data stream comprises including header data in a first data block of each data frame.

23. (Previously Presented) The method of claim 22, further comprising including superframe synchronization bits in the header data.

24. (Previously Presented) The method of claim 23, further comprising including information indicative of the start of an assigned superframe in the superframe synchronization bits, the start being indicated by logic zeroes.

25. (Currently Amended) A data stream receiver for receiving and processing a digital data stream, the data stream receiver comprising:

a data stream reception unit for receiving a digital data stream having at least one data stream unit that includes a frame synchronization word having frame synchronization bits and a data block having data bits;

a synchronization bit detection unit for detecting the frame synchronization words of successive data blocks of the digital data stream; ~~[[and]]~~

a data clock determination unit for determining a data clock from a temporal spacing of successive frame synchronization words from the digital data stream; and

a frame detection unit for detecting a frame start, wherein the frame start of a data frame is defined when a plurality of dummy bits precedes a frame synchronization word, the plurality being at least one greater than the sum of the number of frame synchronization bits in the frame synchronization word and the number of data bits in the data block.

26. (Cancelled)

27. (Previously Presented) The data stream receiver of claim 25, further comprising a superframe detection unit for detecting a superframe start.

28. (Currently Amended) A manufacture having encoded thereon a digital data stream transmitted by the method of claim 16 a method for transmitting a digital data stream, in which method data clock information and data frame information are recovered from the digital data stream, the method comprising:

providing a digital data stream having successive data stream units, each data stream unit including a data frame, a data block having data bits, and a frame synchronization word having frame synchronization bits; wherein a frame start of a data frame is defined when a plurality

of dummy bits precedes a frame synchronization word, the plurality being at least one greater than the sum of the number of frame synchronization bits in the frame synchronization word and the number of data bits in the data block;

receiving the digital data stream;

detecting successive frame synchronization words of the successive data stream units;

determining the data clock information from a temporal spacing of the successive frame synchronization words; and

outputting the data clock information in a manner dependent on a temporal spacing of successive frame synchronization bits.

29. (Currently Amended) An interface module that includes a data stream receiver as ~~recited in claim 25~~ for receiving and processing a digital data stream, the data stream receiver comprising:

a data stream reception unit for receiving a digital data stream having at least one data stream unit that includes a frame synchronization word having frame synchronization bits and a data block having data bits;

a synchronization bit detection unit for detecting the frame synchronization words of successive data blocks of the digital data stream; and

a data clock determination unit for determining a data clock from a temporal spacing of successive frame synchronization words from the digital data stream; and

Applicant : Reinhard Muller
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a frame detection unit for detecting a frame start, wherein the frame start of a data frame is defined when a plurality of dummy bits precedes a frame synchronization word, the plurality being at least one greater than the sum of the number of frame synchronization bits in the frame synchronization word and the number of data bits in the data block.